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Worldwide Report

**TELECOMMUNICATIONS POLICY,
RESEARCH AND DEVELOPMENT**

No. 116



FOREIGN BROADCAST INFORMATION SERVICE

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WORLDWIDE REPORT
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CULTURAL AGREEMENT BETWEEN RADIO CZECHOSLOVAKIA-ETHIOPIA

Addis Ababa THE ETHIOPIAN HERALD in English 18 Mar 80 p 1

[Text] Addis Ababa (ENA)--An agreement on cultural exchange was signed here yesterday afternoon between Radio Voice of Revolutionary Ethiopia (RVRE) and Radio Czechoslovakia.

The agreement was signed within the framework of the cultural co-operation agreement of 1978. The cultural co-operation agreement was signed during the visit to Czechoslovakia by Comrade Chairman Mengistu Haile-Mariam, Chairman of the Provisional Military Administrative Council (PMAC) and Commander-in-Chief of the Revolutionary Army of Socialist Ethiopia.

Comrade Major Girma Yilma, Minister of Information and National Guidance initialled on behalf of RVRE and Comrade Pecl Ibor, Ambassador of the Czechoslovak Socialist Republic to Ethiopia, signed for Radio Czechoslovakia.

The signing ceremony at the Ministry of Information and National Guidance was attended by Comrades Gedamu Abraha, head of RVRE, Tesfaye Habteh-Yimer, head of the Ethiopian News Agency, Wollie Gurumu, head of the Public Relations Department in the Ministry, and officials of the Czechoslovak Embassy here.

Comrade Major Girma recalled the long-standing relations between Ethiopia and Czechoslovakia and observed that these relations got momentum since the Ethiopian people's revolution.

The Comrade Minister said that yesterday's agreement will further enhance the comradely relations of the two countries, specially their common struggle for peace, independence and socialism to prevail in the world.

Comrade Ambassador Libor on his part said that the revolution of the Ethiopian people has enabled this country to build a just and progressive social system for the broad masses. Comrade Libor pointed out that the popular revolution has also opened the way to closer fraternal relations between the peoples and governments of the two countries.

The Czechoslovak Ambassador recalled that his country steadfastly stood on the side of Revolutionary Ethiopia during the struggle of the people to defend their revolution and territorial integrity.

Comrade Ambassador Libor stated that the visit of Comrade Chairman Mengistu Haile-Mariam is looked upon by and a new age of friendly relations between the countries. He added that the agreement between the two radio stations is also a further proof of the common activity of the two countries.

The Ambassador hoped that the agreement will help develop the existing relations of the two radio stations to the mutual benefit of the Ethiopian and Czechoslovak people.

Within the agreement, the two radio stations will mutually observe the National Days of the two countries by arranging due coverage, exchange programmes and work together in the spirit of proletarian internationalism.

The agreement also provides for the exchange of expertise and training facilities.

CSO: 5500

BBC EXPERTS TO 'WORK WITH' ZBC

Salisbury THE HERALD in English 31 Mar 80 p 2

[Text] A team of four experts from the BBC has arrived in Rhodesia to carry out an in-depth study of the ZBC's broadcasting system and to recommend changes--where necessary--for its improvement.

The group is led by the Controller English Services and Editor of the BBC World Service, Mr Austen Kark, who has been with the BBC for 25 years.

The other members are Chief Assistant to the Director-General, Mr Peter Hardiman Scott, a former political correspondent, the Deputy Assistant Director, News and Current Affairs, Mr Andrew Todd, and the Chief Engineer, Regions, Mr Brendan Slamin.

Mr Kark said the group would study Rhodesia's broadcasting system, working hand in hand with the ZBC Director-General, Mr James Neill. He said his party would make recommendations, where necessary, for the improvement of "Broadcasting as an instrument of education and bringing the new nation of Zimbabwe together."

He said: "I hope we will be able to help in providing new ideas, training of staff and also provision of new equipment." He hoped the four of them had enough expertise and experience to make a valuable contribution to the future of the country.

Before assuming his present post, Mr Kark was feature and script writer/producer and also head of various departments in the External Services, Mr Kark said he would not be staying in Zimbabwe for more than two weeks. "The other three will be staying for three weeks," he said.

Mr. Scott's duty as chief assistant to the BBC Director-General is to liaise and monitor British political parties and advise the Director-General.

"My job is to sense out where trouble is coming from and deal with it--I am a trouble shooter," he said.

Before becoming Deputy Assistant Director, News and Current Affairs, Mr Todd was editor of TV news. He is now retired.

Mr Slamin has been with the BBC for over 25 years. He is Chief Engineer for regions outside London.

The team has met the Prime Minister, Mr Mugabe, and the Minister of Information, Mr Shamuyarira, and intend to begin their work today.

CSO: 5500

FINN FIRM IS FIRST IN WEST TO USE SOVIET MICROPROCESSORS

Helsinki UUSI SUOMI in Finnish 5 Mar 80 p 15

[Article: "Teleste Corporation Wants Cooperation with Soviet Union"]

[Text] The Teleste Corporation of Turku is the first Western firm to use Soviet-made microprocessors in its communications system. At the present time Teleste is negotiating with the Soviets for more extensive cooperation in the development of automated systems for hotels.

"Teleste has now concluded adaptation work on the Soviet-made microprocessor Electronica 60 for use in the HCS 500 room-to-room communication system for hotels, with which it will be possible to direct the work of cleaning personnel, give wake-up calls, reserve rooms, calculate expenditures, turn off room lights, and switch off telephones," stated Managing Director Erkki Backman of Teleste.

In the near future such a system will be installed in the Hotel Olympic in Tallinn and before this it was presented in Turku at the plant to Soyuzeyev-neshstroyimport Director Viktor A. Prasolov.

Negotiations concerning installation of this system in a hotel already under construction in Leningrad are in progress.

The Teleste Corporation is an electronics firm specializing in short distance communication, whose sales is 50 million markkas.

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CSO: 5500

AUSTRALIAN SCHOOL TRAINS TELEVISION CREW FOR BURMA

Sydney THE SYDNEY MORNING HERALD in English 20 Feb 80 p 13

[Report by Roger Collier]

[Text]

Burma's President, General U Ne Win, thought he had the ideal solution to unify the many tribes which make up the Burmese nation.

He decided to introduce television so that each group could see how the others lived.

The trouble was that Burma had neither any television equipment nor anyone with the slightest idea of how to use it.

So yesterday 12 Burmese students arrived at the Australian Film and Television School, North Ryde, for training.

And the Burmese Government plans to import some TV sets and distribute them around the capital, Rangoon.

The students' arrival followed a series of problems.

Burma's fierce protection of its independence forbade General Ne Win to seek development aid from overseas. To do so would have meant loss of face.

So he sent two liaison offi-

cers around the various embassies dropping what might loosely be termed broad hints.

The result was that Burma was given basic equipment by Japan, which also offered technical training. But the language barrier proved too great.

Then Britain offered to help, but the Burmese found the BBC too sophisticated for their needs.

In the end, the Australian Film and Television School came to the rescue.

The Burmese will have just 10 weeks to learn how to put a program together and get it on air.

"It should be an interesting experience," their course director, Mr Ron Anderson, said as he took them around one of the studios.

The school's technical controller, Mr Alan Morrison, said: "Apart from the intensity of the course facing the Burmese, the course itself will be a new venture for us.

"It will be the first time that we have had to train an entire production crew at the same time."

CONTROVERCY REPORTED OVER INSTALLATION OF TELETEXT

Sydney THE SYDNEY MORNING HERALD in English 16 Feb 80 p 25

[Text.]

ATN 7 has rejected a Labor Party claim that the Federal Government, in approving the teletext system, "has given Australians an outdated form of the electronic newspaper."

The general manager of ATN, Mr Ted Thomas, said teletext was the only fully developed broadcast data system suitable for Australian television at present.

The Minister for Post and Telecommunication, Mr Staley, announced the approval of teletext on February 4. It is a system which allows people with modified TV sets to call up a wide range of information on their screens.

In commenting on the approval, the Federal Opposition's spokesman on education, Senator John Button, said most authorities believed Australia should have adopted the newer Canadian Telidon (or Videotex) system.

"It seems that the minister has succumbed to the pressure of one Sydney station, ATN 7, which has invested substantially in teletext," he said.

"ATN 7 appears to be the only station which is keen to go ahead at this stage. Other stations have indicated privately that they would have preferred the adoption of Videotex.

"Unlike teletext, Videotex is capable of faithfully reproducing diagrams, it is more flexible, and dials up information more quickly. It is also compatible with new data-transmission systems being introduced by Telecom.

"Teletext was developed in Britain, where it has failed to capture mass support, yet Australians are now to be saddled with it because one commercial station has overspent on it."

Mr Thomas said it was clear that Senator Button had received misleading information from his technical advisers.

"Teletext is the fastest system available for the type of information we believe the public requires now," he said.

The Canadian system was an experimental one that had not been fully broadcast tested and not yet commercially exploited or developed.

Even if it could be proven successful as broadcast system, it would be many years before it was available commercially.

Mr Thomas said several other stations had made similar investments to ATN's in teletext equipment.

"There is ample space in the television signal to accommodate other systems, if and when they become available," he said.

"We do not want to see the public denied a substantial new information service in the hope that someone, some day, will come up with something better."

TELECOM REPORTS INCREASED PROFITS, FUTURE PLANS

Melbourne THE AGE in English 29 Feb 80 p 3

[Report by Richard Willis]

[Text]

Telecom Australia made a profit of \$111.7 million in the half year to last December, an 11 per cent better showing than a year before.

And there was good news with yesterday's statement: predictions of cheaper STD calls, 700 jobs created this financial year, no borrowings by Telecom from taxpayers through the Federal budget, an upgrading in rural telephone services, introduction of the new community phone call and a continued freeze on the price of local calls, telex and other services.

But the bad news is the continued loss incurred by the industry's oldest service — the telegram.

While there is no suggestion of an increase in cost of the telegram, or a move to phase it out, officials at Telecom still believe it should pay for itself.

Telecom's chairman, Mr. R. D. Sommerville, said yesterday the profit came after paying \$180.6 million interest to Telecom stockholders and the Government and providing \$221.1 million for depreciation.

Mr. Sommerville said: "We can now plan ahead, ensuring about 700 new jobs during this financial year and looking to further reductions in some of our STD charges."

"The profit has been ploughed back into our capital programme on which \$495 million was spent up to the end of December.

"As a result, connections of new telephones, telex and data services have been slightly ahead of demand received during the period which has enabled a slight reduction in the amount of work outstanding." Mr. Sommerville said.

Telecom earnings in the second half of last year reached \$1086 million with operating expenses of \$984 million and capital expenditure of \$495 million.

Mr. Sommerville said progress was made in upgrading rural telephone services in preparation for Community Access 80, which will reduce call charges for some country areas in May.

Developed areas close to large capital cities and isolated areas calling the nearest big business centre will benefit from the community call, which will cost nine cents for three minutes between 8 am and 9 pm.

Mr. Sommerville said: "The capital programme this financial year will reach \$1000 million fully financed from internal funds and public borrowings. We will not borrow from taxpayers through the Federal budget."

He said Telecom had more than 100 major projects under way and needed to connect more than 2000 new services each working day to meet demand.

INDIA

BRIEFS

FUNDS FOR TV DEVELOPMENT--The Planning Commission has agreed for an outlay of 500 million rupees for television development during the 6th plan. This includes provision for continuing schemes as well as new schemes. Disclosing this in the Lower House of Parliament today, Minister for Information and Broadcasting Vasant Sathe said the 6th plan proposals include the setting up of fullfledged TV centers at four places, relay centers in 10 cities and program production centers at three places. It was also stated that a scheme, estimated to cost over 460 million rupees, to cover the first phase of hardware aspects of the TV ground segment of the Indian satellite INSAT I for coverage of rural areas by television, is under consideration. [Delhi General Overseas Service in English 1000 GMT 18 Mar 80 BK]

CSO: 5500

PEOPLE'S REPUBLIC OF CHINA

BRIEFS

COLOR TV PRODUCTION--The FRG's AEG-Telefunken company will cooperate with the PRC in the production of color TV sets, said a spokesman for the company in Hanover at the close of a visit [to the FRG] by a 7-member Chinese delegation. The PRC will purchase components and modules from the FRG and produce color TVs under the Telefunken trademark. In addition, the PRC will be provided technical assistance in the manufacture of these sets. The FRG will also train Chinese technicians. In the early '70s, you will recall that the PRC elected to go with the PAL system of color TV broadcasting. [Text] [Paris ELECTRONIQUE ACTUALITES in French 31 Mar 80 p 6].

CSO: 5500

POLISH-FOREIGN SEMICONDUCTOR, INTEGRATED-CIRCUIT EQUIVALENTS LISTED

Warsaw WIADOMOSCI TELEKOMUNIKACYJNE in Polish No 10, Oct 79 pp 295-302

[Series of tabular lists: 'Semiconductor Devices and Integrated Circuits (Preferential List for 1980 and 1981)']

[Text] Preferential lists published in WIADOMOSCI TELEKOMUNIKACYJNE have evoked a favorable response on the part of our readers, and we are therefore continuing to communicate this type of information, presenting below a list of recommended semiconductor devices and integrated circuits designed for general-application and professional equipment.

The list contains both devices manufactured in Poland and items approved for import on the basis of anticipated Polish manufacture or particular suitability.

Table 1 contains semiconductor devices manufactured by the UNITRA-CEMI Semiconductor Scientific-Production Center and the UNITRA-DOLAM Lower Silesian Electronics Plant. Table 2 contains semiconductor devices approved for import, while Table 3 lists the identifying designations of Polish and foreign manufacturers the products of which are listed in tables 1 and 2.

Table 1. Semiconductor Devices and Integrated Circuits Designed for Application in Professional and General-Purpose Equipment

1. Diodes

1.1. Rectifying Diodes

No	Product Designation	Equivalent Foreign-Made Product	Manufacturer	Comments
1	BA157	BA157-ITT	L-21	
2	BA158	BA158-ITT	L-21	
3	BA159	BA159-ITT	L-21	
4	BYP150-50	1P643-ITT	L-21	
5	BYP150-100	1P644-ITT	L-21	

6	BYP150-225	1P645-ITT	L-21
7	BYP150-300	1P646-ITT	L-21
8	BYP150-400	1P647-ITT	L-21
9	BYP150-600	1P649-ITT	L-21
10	BYP401-50	1N4001-Tfk	L-21
11	BYP401-100	1N4002-Tfk	L-21
12	BYP401-200	1N4003-Tfk	L-21
13	BYP401-400	1N4004-Tfk	L-21
14	BYP401-600	1N4005-Tfk	L-21
15	BYP401-800	1N4006-Tfk	L-21
16	BYP401-1000	1N4007-Tfk	L-21
17	BYP680-50	-	L-21
18	BYP680-50R	GD7H5-So	L-21
19	BYP680-100	-	L-21
20	BYP680-100R	GD14H5-So	L-21
21	BYP680-300	-	L-21
22	BYP680-300R	GD21H5-So	L-21
23	BYP680-500	-	L-21
24	BYP680-500R	GD42H5-So	L-21
25	BYP680-600	-	L-21
26	BYP680-600R	GD56H5-So	L-21

1.2. General Purpose Diodes

No	Product Designation	Equivalent Foreign-Made Product	Manufacturer	Comments
1	AAP120	~AA132-Tfk	L-21	
2	AAP152	~AA112-Tfk	L-21	
3	AAP153	~AA119-Tfk	L-21	
4	AAP155	~AA113-Tfk	L-21	
5	AAP161	~AA112-Tfk	L-21	
6	AAP162	~AA112-Tfk	L-21	
7	GD507A	AAYP37-CEMI	USSR	switching

1.3. Switching Diodes

No	Product Designation	Equivalent Foreign-Made Product	Manufacturer	Comments
1	BA152P	BA152P-Sc	L-21	
2	BA182	BA182-Sc	L-21	
3	BAE795	BAW63-Fe	L-21	
4	BAE795R	-	L-21	
5	BAE895	BAW64-Fe	L-21	
6	BAE995	BAW66-Fe	L-21	
7	BAP794	~1N4154-Sc	L-21	
8	BAP794A	~1N4152-Sc	L-21	
9	BAP795	~1N4151-Sc	L-21	
10	BAP795A	~1N4153-Sc	L-21	

11	BAVP17	BAV17-ITT	ZE
12	BAVP18	BAV18-ITT	ZE
13	BAVP19	BAV19-ITT	ZE
14	BAVP20	BAV20-ITT	ZE
15	BAVP21	BAV21-ITT	ZE
16	BAYP61	1N4148-Sc	ZE
17	BAYP94	1N4154-Sc	ZE
18	BAYP94A	1N4152-Sc	ZE
19	BAYP93	1N4151-Sc	ZE
20	BAYP95A	1N4153-Sc	ZE

1.4. Regulators and Regulator Diodes

No	Product Designation	Equivalent Foreign-Made Product	Manufacturer	Comments
1	BAP811	~ZE1,5-ITT	L-21	
2	BAP812	~ZE2-ITT	L-21	
3	BZP630C ...	ZR7,5...ZR33-Es	ZE	7V5... ...33
4	BZP630D...	ZR1...ZR33-Es	ZE	1; 7V5... ...33
5	BZP630	-	L-21	6V8... ...33
6	BZP683 C,D	BZX83-Sc	ZE	3V3, 6V8,
7	BZP687 0V75	-	L-21	10... ...33*

*7V5...9V1 p. 1980 p.

1.5. High-Voltage Pipes

No	Product Designation	Equivalent Foreign-Made Product	Manufacturer	Comments
1	BYP350-12K		L-21	
2	BYP350-16K		L-21	

1.6. Varactors

No	Product Designation	Equivalent Foreign-Made Product	Manufacturer	Comments
1	BB104B,G	BB104-Sc	L-21	
2	BB105A,B,AD	BB105A-Sc	L-21	
3	BB105B	BB105B-Sc	L-21	
4	BB105G,GD	BB105G-Sc	L-21	

1.7. Varactors

No	Product Designation	Equivalent Foreign-Made Product	Manufacturer	Comments
1	BXYP14	MA4534-MA	B-10	
2	BXYP43	D4865-I-SI	B-10	
3	BXYP44	D4853-C-SI	B-10	
4	BXYP51	D4610J-SI	B-10	
5	BXYP45	-	B-10	
6	BXYP52	-	B-10	
7	BXYP74	BH741-Th	B-10	

1. Schottky Diodes

No	Product Designation	Equivalent Foreign-Made Product	Manufacturer	Comments
1	BAP280	BA-280 Ph	L-21	
2	BAP280B	BA-280 Ph	L-21	
3	BAP280R	BA-280 Ph		

1.9. p-i-n Diodes

No	Product Designation	Equivalent Foreign-Made Product	Manufacturer	Comments
1	BAP379	BA379-S	L-21	

2.1. Transistors

2.1. Low-Power, Low-Frequency Transistors

No	Product Designation	Equivalent Foreign-Made Product	Manufacturer	Polarization
1	BC107	BC107-Tfk	L-21	n-p-n
2	BC108	BC108-Tfk	L-21	n-p-n
3	BC109	BC109-Tfk	L-21	n-p-n
4	BC147	~BC147-Ph	L-21	n-p-n
5	BC148	~BC148-Ph	L-21	n-p-n
6	BC149	~BC149-Ph	L-21	n-p-n
7	BC157	~BC157-Ph	L-21	p-n-p

8	BC158	~BC158-Ph	L-21	p-n-p
9	BC159	~BC159-Ph	L-21	p-n-p
10	BC177	BC177-Tfk	L-21	p-n-p
11	BC178	BC178-Tfk	L-21	p-n-p
12	BC179	BC179-Tfk	L-21	p-n-p
13	BC237	BC237-Tfk	L-21	n-p-n
14	BC238	BC238-Tfk	L-21	n-p-n
15	BC239	BC239-Tfk	L-21	n-p-n
16	BC307	BC307-Tfk	L-21	p-p
17	BC308	BC308-Tfk	L-21	p-n-p
18	BC309	BC309-Tfk	L-21	p-n-p
19	BC337	BC337-Sc	L-21	n-p-n
20	BC338	BC338-Sc	L-21	n-p-n
21	BC413	BC413-Sc	L-21	n-p-n
22	BC414	BC414-Tfk	L-21	n-p-n
23	BC527	~BC107-Tfk	L-21	n-p-n
24	BC528	~BC108-Tfk	L-21	n-p-n
25	BCE107	BCW71-72R-Ph	L-21	n-p-n
26	BCE108	BCW31-33R-Ph	L-21	n-p-n
27	BCE109	BCW32-33R-Ph	L-21	n-p-n
28	BCE107R	BCW71-72-Ph	L-21	n-p-n
29	BCE108R	BCW31-32,33-Ph	L-21	n-p-n
30	BCE109R	BCW32,33-Ph	L-21	n-p-n
31	BCE177	BCW69-70R-Ph	L-21	p-n-p
32	BCE178	BCW29-30R-Ph	L-21	p-n-p
33	BCE179	BCW30R-Ph	L-21	p-n-p
34	BCE177R	BCW69-70-Ph	L-21	p-n-p
35	BCE178R	BCW29-30-Ph	L-21	p-n-p
36	BCE179R	BCW30-Ph	L-21	p-n-p
37	BCP627	~BC237-Tfk	L-21	n-p-n
38	BCP628	~BC238-Tfk	L-21	n-p-n

2.2. Medium-Power, Low-Frequency Transistors

No	Product Designation	Equivalent Foreign-Made Product	Manufacturer	Polarization
1	BC211	BC211-Sc	L-21	n-p-n
2	BC313	BC313-Sc	L-21	p-n-p
3	BD135	BD135-Sc	L-21	n-p-n
4	BD136	BD136-Sc	L-21	p-n-p
5	BD137	BD137-Sc	L-21	n-p-n
6	BD138	BD138-Sc	L-21	p-n-p
7	BD139	BD139-Sc	L-21	n-p-n
8	BD140	BD140-Sc	L-21	p-n-p

2.3. Medium-Power, Low-Frequency, High-Voltage Transistors

No	Product Designation	Equivalent Foreign-Made Product	Manufacturer	Polarization
1	BD127	BD127-Tfk	L-21	n-p-n
2	BD128	BD128-Tfk	L-21	n-p-n

3	BD129	BD129-Tfk	L-21	n-p-n
4	BC393	BC393-SGS	L-21	p-n-p

2.4. High-Power, Low and Medium-Frequency Transistors

No	Product Designation	Equivalent Foreign-Made Product	Manufacturer	Polarization
1	BD354	-	L-21	n-p-n
2	BD355	-	L-21	p-n-p
3	BDP281	2N6288-RCA	L-21	n-p-n
4	BDP282	2N6111-RCA	L-21	p-n-p
5	BDP283	2N6290-RCA	L-21	n-p-n
6	BDP284	2N6109-RCA	L-21	p-n-p
7	BDP285	2N6292-RCA	L-21	n-p-n
8	BDP286	2N6107-RCA	L-21	p-n-p
9	BDY23		L-21	n-p-n
10	BDY24		L-21	p-n-p
11	BDY25		L-21	n-p-n

2.5. Low-Power, High-Frequency Transistors

No	Product Designation	Equivalent Foreign-Made Product	Manufacturer	Polarization
1	BF180	BF180-Sc	L-21	n-p-n
2	BF181	BF181-Sc	L-21	n-p-n
3	BF181D		L-21	n-p-n
4	BF182	BF182-Sc	L-21	n-p-n
5	BF183	BF183-Sc	L-21	n-p-n
6	BF194	BF194-Sc	L-21	n-p-n
7	BF195	BF195-Sc	L-21	n-p-n
8	BF196	BF196-Sc	L-21	n-p-n
9	BF197	BF197-Sc	L-21	n-p-n
10	BF200	BF200-Sc	L-21	n-p-n
11	BF214	BF214-Sc	L-21	n-p-n
12	BF215	BF215-Sc	L-21	n-p-n
13	BF240	BF240-Tfk	L-21	n-p-n
14	BF241	BF241-Tfk	L-21	n-p-n
15	BF245	BF245-Sc	L-21	FET (n)
16	BF314	BF314-Tfk	L-21	n-p-n
17	BFE214	BFS19R-Ph	L-21	n-p-n
18	BFE215	BFS18R-Ph	L-21	n-p-n
19	BFE214R	BFS18-Ph	L-21	n-p-n
20	BFE215R	BFS19-Ph	L-21	n-p-n
21	BFP479	BF479-SGS	L-21	p-n-p
22	BFP519	-	L-21	n-p-n
23	BFP520	-	L-21	n-p-n
24	BFP521	-	L-21	n-p-n
24	BFP521	-	L-21	n-p-n

2.6. Medium-Power High-Frequency, High-Voltage Transistors

No	Product Designation	Equivalent Foreign-Made Product	Manufacturer	Polarization
1	BF257	BF257-Sc	L-21	n-p-n
2	BF258	BF258-Sc	L-21	n-p-n
3	BF259	BF259-Sc	L-21	n-p-n
4	BF457	BF457-Sc	L-21	n-p-n
5	BF458	BF458-Sc	L-21	n-p-n
6	BF459	BF459-Sc	L-21	n-p-n

3. Thyristors

3.1. Fast Thyristors for OTVC and OTVM

No	Product Designation	Equivalent Foreign-Made Product	Manufacturer	Comments
1	BTP128-400	S3901D-RCA	L-21	
2	BTP128-550	S3901EF-RCA	L-21	
3	BTP129-650	S3900MF-RCA	L-21	
4	BTP129-750	S3900SF-RCA	L-21	

4. Opto-Electronic Devices

4.1. Photodiodes

No	Product Designation	Equivalent Foreign-Made Product	Manufacturer	Polarization
1	BPYP30	-	B-11	
2	BPYP35	-	B-11	
3	BPYP41	-	B-11	
4	BPYP44	-	B-11	
5	BPYP51	-	B-11	

4.2. Phototransistors

No	Product Designation	Equivalent Foreign-Made Product	Manufacturer	Polarization
1	BPRP25	-	B-11	n-p-n

2	HPXP28	-	B-11	n-p-n
3	HPYP21	-	B-11	n-p-n
4	HPYP22	-	B-11	n-p-n
5	HPYP24	-	B-11	n-p-n
6	HPYP25	-	B-11	n-p-n
7	HPYP26	-	B-11	n-p-n
8	HPYP27	-	B-11	n-p-n

4.3. Photoresistors

No	Product Designation	Equivalent Foreign-Made Product	Manufacturer	Comments
1	RPP111	SMO6R-Ku	ZE	
2	RPP120	-	ZE	
3	RPP121	SMO4W-Ku	ZE	
4	RPP130	LDR03-Ph	ZE	
5	RPP131	SGO4X-Ku	ZE	
6	RFP135	-	ZE	
7	RPP333	-	ZE	
8	RPP550	-	ZE	
9	RPYP63 F,W	-	ZE	

4.4. Electroluminescent Diodes

No	Product Designation	Equivalent Foreign-Made Product	Manufacturer	Comments
1	CQP431	CQY 85	B-11	prod. 1980
2	CQP432	CQY 86	B-11	prod. 1981
3	CQP433	CQY 87	B-11	prod. 1981
4	CQP441	-	B-11	
5	CQP461	-	B-11	
6	CQP462	-	B-11	
7	CQP463	LD 481 A	B-11	prod. 1980
8	CQYP13	-	B-11	structure
9	CQYP14	-	B-11	
10	CQYP15	-	B-11	
11	CQYP17	-	B-11	
12	CQYP19	-	B-11	
13	CQYP20	-	B-11	production
14	CQYP22	-	B-11	open
15	CQYP23	-	B-11	work
16	CQYP32	-	B-11	1980
17	CQYP33	-	B-11	
18	CQYP40	-	B-11	
19	CQYP46	-	B-11	

4.5. Electroluminescent Illuminators

No	Product Designation	Equivalent Foreign-Made Product	Manufacturer	Comments
1	CQYP57	-	B-11	
2	CQYP58	-	B-11	

4.6. Semiconductor Digital Indicators

No	Product Designation	Equivalent Foreign-Made Product	Manufacturer	Comments
1	CQYP74	~FND-70-Fe	B-11	
2	CQYP75	~FND-70-Fe	B-11	
3	CQYP95	-	B-11	
4	CQYP96	5082-7442	B-11	prod. 1981

4.7. Optrons

No	Product Designation	Equivalent Foreign-Made Product	Manufacturer	Comments
1	CNSPI6	-	B-11	
2	CNSPI7	-	B-11	
3	CNSPI8	-	B-11	
4	CQ07B8P	-	B-11	
5	CQ11BP	MCT-4-Ms	B-11	
6	CQ12BP	-	B-11	
7	CQ13BP	TIXL109-Tx	B-11	
8	CQ15BP	-	B-11	
9	CQ22BP	MCD-4-Ms	B-11	
10	CQ32BP	-	B-11	

5. Thermistors

No	Product Designation	Equivalent Foreign-Made Product	Manufacturer	Comments
1	CTR110	-	B-10	
2	CTR200	-	B-10	
3	CTR300	-	B-10	
4	CTR400	-	B-10	
5	NTC21	232263411...Ph	L-21	
6	NTC110	232264211...Ph	L-21	

7	NTC111	2322619900003- -Ph	L-21
8	NTC120	23226109...Ph	L-21
9	NTC210	232262711...Ph	L-21
10	NTC211	232262721...Ph	L-21
11	NTC212	23226272...Ph	L-21
12	NTC213	VA3406 ÷ 10 Mu	L-21
13	NTC214	23226272...Ph	L-21
14	NTC220	A-ITT	L-21
15	NTC221	232263431-Ph	L-21
16	NTC230	2322628013-Ph	L-21
17	NTC501	2322611...Ph	L-21

6. Hall Generators

No	Product Designation	Equivalent Foreign-Made Product	Manufacturer	Comments
1	DKWP40	-	ZE	
2	DKWP60	-	ZE	

7. Analog Monolithic Integrated Circuits

No	Product Designation	Equivalent Foreign-Made Product	Manufacturer	Comments
1	UL1000L	~TAB101-Ph	L-21	
2	UL1101N	~CA3054-RCA	L-21	
3	UL1102N	CA3054-RCA	L-21	
4	UL1111N	CA3046-RCA	L-21	
5	UL1121N	LB9021-Sa	L-21	
6	UL1200N	TDA1200-SGS	L-21	
7	UL1201N	CA3011-RCA	L-21	
8	UL1202L	LA1221-Sa	L-21	
9	UL1211N	LA1201-Sa	L-21	
10	UL1212N	TBA690-Ph	L-21	
11	UL1213N	TBA700-Ph	L-21	
12	UL1221N	MC1352-Mo	L-21	
13	UL1231N	MC1353-Mo	L-21	
14	UL1241N	CA3042-RCA	L-21	
15	UL1242N	TBA120S-Tfk	L-21	
16	UL1244N	TBA120U-S	L-21	
17	UL1261N	TBA940-ITT	L-21	
18	UL1262N	TBA950-ITT	L-21	
19	UL1265P	TDA1170-SGS	L-21	prod. 1980
20	UL1321N	LA3101-Sa	L-21	
21	UL1401P	~LA4030P-Sa	L-21	
22	UL1402P	~LA4031P-Sa	L-21	
23	UL1403P	~LA4032P-Sa	L-21	
24	UL1440T	TCA940-SGS	L-21	
25	UL1480P	TBA800-Sc	L-21	

26	UL1481P	TBA810S-Sc	L-21	
27	UL1481T	TBA810AS-Sc	L-21	
28	UL1482M	TBA820-SC	L-21	prod. 1980
29	UL1490N	TBA790X-Sc	L-21	
30	UL1493N	TBA790X-Sc	L-21	
31	UL1496R	~TBA790LA-Sc	L-21	
32	UL1497R	~TBA790LB-Sc	L-21	
33	UL1498R	~TBA790LG-Sc	L-21	
34	UL150L	TCA720-ITT	L-21	
35	UL1540N	TDA2640-Mu	L-21	
36	UL1550L	TAA550-Sc	L-21	
37	UL1601N	uA767-Fa	L-21	
38	UL1611N	LA3310-Sa	L-21	
39	UL1621N	TCA4500A-Mo	L-21	prod. 1980
40	UL1901M	ESM227-Sc	L-21	prod. 1980
41	UL1970N	UAA170-S	L-21	
42	UL1980N	UAA180-S	L-21	prod. 1981
43	ULY7710N	SFC2710EC-Sc	L-21	
44	ULY7711N	SFC2711EC-Sc	L-21	
45	ULY7741N	SFC2741DC-Sc	L-21	

8. Digital Monolithic Integrated Circuits

8.1. Bipolar Digital Monolithic Integrated Circuits

No	Product Designation	Equivalent Foreign-Made Product	Manufacturer	Comments
1	UCY74H00N	SFC400HE-Sc	L-21	
2	UCY74H10N	SFC410HE-Sc	L-21	
3	UCY74H40N	SFC440HE-Sc	L-21	
4	UCY74H50N	SFC450HE-Sc	L-21	
5	UCY74H53N	SFC453HE-Sc	L-21	
6	UCY74H72N	SFC472HE-Sc	L-21	
7	UCY74H74N	SFC474HE-Sc	L-21	
8	UCY7400N	SFC400E-Sc	L-21	
9	UCY7401N	SFC401E-Sc	L-21	
10	UCY7402N	SFC402E-Sc	L-21	
11	UCY7403N	SFC403E-Sc	L-21	
12	UCY7404N	SFC404E-Sc	L-21	
13	UCY7406N	SFC406E-Sc	L-21	
14	UCY7407N	SFC407E-Sc	L-21	
15	UCY7408N	SFC408E-Sc	L-21	
16	UCY7409N	SFC409E-Sc	L-21	
17	UCY7410N	SFC410E-Sc	L-21	
18	UCY7416N	SFC416E-Sc	L-21	
19	UCY7417N	SFC417E-Sc	L-21	
20	UCY7420N	SFC420E-Sc	L-21	
21	UCY7430N	SFC430E-Sc	L-21	
22	UCY7437N	SFC437E-Sc	L-21	
23	UCY7438N	SFC438E-Sc	L-21	

24	UCY7440N	SFC440E-Sc	L-21	
25	UCY7442N	SFC442E-Sc	L-21	
26	UCY7447N	SFC442E-Sc	L-21	
27	UCY7450N	SFC450E-Sc	L-21	
28	UCY7451N	SFC451E-Sc	L-21	
29	UCY7453N	SFC453E-Sc	L-21	
30	UCY7454N	SFC454E-Sc	L-21	
31	UCY7460N	SFC460E-Sc	L-21	
32	UCY7472N	SFC472E-Sc	L-21	
33	UCY7473N	SFC473E-Sc	L-21	
34	UCY7474N	SFC474E-Sc	L-21	
35	UCY7475N	SFC475E-Sc	L-21	
36	UCY7476N	SFC476E-Sc	L-21	
37	UCY7483N	SFC483E-Sc	L-21	
38	UCY7485N	SFC485E-Sc	L-21	
39	UCY7486N	SFC486E-Sc	L-21	
40	UCY7490N	SFC490E-Sc	L-21	
41	UCY7492N	SFC492E-Sc	L-21	
42	UCY7493N	SFC493E-Sc	L-21	
43	UCY7495N	SFC495E-Sc	L-21	
44	UCY74107N	SFC4107E-Sc	L-21	
45	UCY74121N	SFC4121E-Sc	L-21	
46	UCY74123N	SFC4123E-Sc	L-21	
47	UCY74132N	SFC4132E-Sc	L-21	
48	UCY74145N	SFC4145E-Sc	L-21	
49	UCY74150N	SFC4150E-Sc	L-21	
50	UCY74151N	SFC4151E-Sc	L-21	
51	UCY74153N	SFC4153E-Sc	L-21	
52	UCY74154N	SFC4154E-Sc	L-21	
53	UCY74155N	SFC4155E-Sc	L-21	
54	UCY74157N	SFC4157E-Sc	L-21	
55	UCY74164N	SFC4164E-Sc	L-21	
56	UCY74165N	SFC4165E-Sc	L-21	
57	UCY74174N	SFC4174E-Sc	L-21	
58	UCY74175N	SFC4175E-Sc	L-21	
59	UCY74180N	SFC4180E-Sc	L-21	
60	UCY74181N	SFC4181E-Sc	L-21	
61	UCY74192N	SFC4192E-Sc	L-21	
62	UCY74193N	SFC4193E-Sc	L-21	
63	UCY74194N	SFC4194E-Sc	L-21	
64	UCY74198N	SFC4198E-Sc	L-21	
65	UCY74548N	SFC4198E-Sc	L-21	
66	UCY75107N	SFC5107AE-Sc	L-21	
67	UCY75108N	SFC5108AE-Sc	L-21	
68	UCY75110N	SFC5110E-Sc	L-21	
69	UCY75450N	SFC5450AE-Sc	L-21	
70	UCY75451N	SFC5451AD-Sc	L-21	
71	UCY75452N	SFC5452D-Sc	L-21	
72	UCY780101N	SFC80101E-Sc	L-21	
73	UCY74500N	SFC400S-Sc	L-21	prod. 1980
74	UCY74520N	SFC420S-Sc	L-21	prod. 1980

8.2. Digital Monolithic Integrated Circuits With MOS Structures

No	Product Designation	Equivalent Foreign-Made Product	Manufacturer	Comments
1	MC74007N	MPS7541-007Mi	L-21	
2	MCX1201	-	L-21	
3	MCX1202		L-21	prod. 1980
			L-21	
4	MC74017		L-21	prod. 1980
5	MCY7102N,J	2102A Sn	L-21	prod. 1980
6	MCY7506N,J	1506 Jn	L-21	prod. 1980

10. Analog-Hybrid Integrated Circuits

No	Product Designation	Equivalent Foreign-Made Product	Manufacturer	Comments
1	HRV7140R	-	PIE-WH	
2	HRV7240R	-	PIE-WH	
3	HRV7340R	-	PIE-WH	
4	HRV7440R	-	PIE-WH	
5	HRV7150R	-	PIE-WH	
6	HRV7250R	-	PIE-WH	
7	HRV7350R	-	PIE-WH	
8	HRV7450R	-	PIE-WH	
9	HRV7341R	-	PIE-WH	
10	HRV7441R	-	PIE-WH	
11	HRV7361R	-	PIE-WH	
12	HRV7461R	-	PIE-WH	
13	HLX1404R	-	PIE-WH	

11. Passive Hybrid Integrated Circuits

No	Product Designation	Equivalent Foreign-Made Product	Manufacturer	Comments
1	HRV800R	model 10001-008-LCC	PIE-WH	

Table 2. Semiconductor Devices Approved for Import

1. Diodes

No	Product Designation	Equivalent Foreign-Made Product	Manufacturer	Comments
1	BAV10		Tx	
2	BAX12		Ph	
3	BD113		S	
4	B80C2500		EJ	
5	DS-350A	BYP350-12k CEMI	Sa	
6	DS-350B	BYP350-16k CEMI	Sa	
7	SLP24		Sa	
8	SY335/4		RFT	
9	SY335/6		RFT	
10	1PM03		I.P.R.S.	
11	1PM1		I.P.R.S.	
12	1PM2		I.P.R.S.	
13	1PM4		I.P.R.S.	

2. Transistors

No	Product Designation	Equivalent Foreign-Made Product	Manufacturer	Polarization
1	BD173		Tfk	n-p-n
2	BD176		Tfk	p-n-p
3	BDY73		Sc	n-p-n
4	BF960		Sc	n-p-n
5	BF960S			MOS FET (n)
6	BF961		S	MOS FET (n)
7	BFW16A		S	MOS FET (n)
8	BU109		Ph	n-p-n
9	BU204		Sc	n-p-n
10	BU326		Sc	n-p-n
11	BU407		Sc	n-p-n
12	KD502		Ta	n-p-n
13	KF321		Ta	MOS FET

14	SM103		RFT	(n) MOS FET
15	SM104		RFT	(n) MOS FET
16	SMY50		RFT	(n) MOS FET
17	SMY51		RFT	(p) MOS FET
18	SMY52		RFT	(p) MOS FET
19	2N2647		Mo	(p) UJT
20	2N3053		Tu	n-p-a
21	2N3823		Tx	FET
22	2N6486		RCA	(n) n-p-n
23	2N6487		RCA	n-p-a
24	2N6488		RCA	n-p-n
25	2N6489		RCA	p-n-p
26	2N6490		RCA	p-n-p
27	2N6491		RCA	p-n-p
28	40763		RCA	FET (a)
29	2N2220	BSXP67	Sc	
30	2N2221	BSXP66	Sc	
31	2N2222	BSXP65	Sc	
		BSAP22		
32	2N2219	BSBP19	Sc	
33	2N914	BSXP87	Sc	
34	2N706	BSYP62	Sc	
35	2N708	BSYP6J	Sc	
36	2N2369	BSXP87	Sc	
37	2N2904	BSYP04	Sc	
38	2N2905			
		BSYP05	Sc	
39	2N2905A			
40	2N20906	BSYP06	Sc	
41	2N2907			
		BSYP07	Sc	
42	2N2907A			
43	2N23609S	BSDP20	Tx	
44	2N2360	BSXP9J	Tx	
45	BSX59	BSXP59	Tx	
46	BSX59a	BSDP59	Tx	
47	BSX61	BSX610	Tx	
48	BSX61	BSXP61	Tx	

3. Analog Monolithic Integrated Circuits

No	Product Designation	Equivalent Foreign-Made Product	Manufacturer	Comments
1	A109C	-	RFT	
2	A110C		RFT	
3	A240	TDA440-ITk		
4	B109C		RTF	
5	B110C		RFT	
6	MAA436		Ta	
7	MAA502		Ta	
8	MAA723		Ta	
9	NE645B		Sc	
10	SAA1024		ITT	
11	SAA1025		ITT	
12	SAS580		S	
13	SAS590		S	
14	SFC2805		Sc	
15	SFC2812		Sc	
16	SFC2815		Sc	
17	SN5511		Tx	
18	SN7511		Tx	
19	SN7522		Tx	
20	SN7524		Tx	
21	SN75324		Tx	
22	SL440		PI	
23	TBA931		SGS	
24	TID126		Tx	
25	UAA1004		Mo	
26	U700D		RFT	
27	S042P		S	
28	TDA1053		ITT	
29	TDA2850		S	

4. Digital Monolithic Integrated Circuits

No	Product Designation	Equivalent Foreign-Made Product	Manufacturer	Comments
1	SFC400LE		Sc	
2	SFC420HE		Sc	
3	SFC472LE		Sc	
4	SFC473LE		Sc	
5	SFC487HE		Sc	
6	SFC493LE		Sc	
7	SN7446AN		Tx	
8	SN72555N		Tx	
9	SN74141N	MH74141-Ta	Tx	
10	TMS2501JC		Tx	

5. Thyristors

No	Product Designation	Equivalent Foreign-Made Product	Manufacturer	Comments
1	2N6343		Mo	triac

Table 3. List of Manufacturers

Polish Manufacturers

L-7	UNITRA-TELPOD Krakow Electronics Plant, ul. Lipowa 4, 30-702 Krakow
L-14	UNITRA-ELEKTRON Lamina Electronics Plant, ul. Pulawska 34, 05-500 Piaseczno
CEMI	Semiconductor Scientific-Production Center, ul. plk. Wladimira Komarowa 5, 02-675, Warsaw
L-21	TEWA Semiconductor Factory, ul. plk. Wladimira Komarowa 5, 02-675, Warsaw
B-10	Electronics Technology Institute, Semiconductor Scientific-Production Center, al. Lotnikow 32/46, 02-668, Warsaw
B-11	Electronics Technology Institute Experimental Semiconductor Plant, ul. plk. Wladimira Komarowa 5, 02-675, Warsaw
ZE	Electronics Plant, ul. Mlodziezowa 29/37, 87-100 Torun
PIE-WH	Hybrid Circuits Experimental Department, Industrial Electronics Institute, ul. Modlinska 15, 03-216, Warsaw
DOLAM	UNITRA-DOLAM Lower Silesian Electronics Plant, ul. Krakowska 56/78, 50-425, Wroclaw
P-I	Polam Roza Luksemburg Electric Lamp Manufacturing Plant, ul. Karolkowa 32/44, 00-961, Warsaw

Foreign Manufacturers

AEI	AEI Semiconductors, Great Britain
Ae	Amelco, USA
A	Alcatel, France
Be	Beckman, USA
D	Delco, USA
Ei	Elektronska Industrija, Yugoslavia
Fa	Fairchild, USA
Fe	Ferranti, Great Britain
Ge	General Electric, USA
Hi	Hitachi, Japan
HP	Hewlett Packard, USA
ITT	Intermetall, FRG
I.P.R.S.	Socialist Republic of Romania
IR	International Rectifier, USA
In	Intel, USA
Ku	Kurake, Japan
LCC	Thomson CSF -- LCC, France

Lx	Litronix, USA
M	Mullard, Great Britain
MA	Microwave Associates, USA
Mi	Mitsubishi, Japan
Mo	Motorola, USA
Ms	Monsanto, USA
Mt	MOS Technology Inc., USA
N	Nucleonic, USA
No	Norton, Great Britain
NS	National Semiconductor, USA
Oi	Opcoa Inc., USA
Ph	Philips, Netherlands
PC	Philco, USA
Pl	Plessey -- Great Britain
RCA	RCA -- USA
RFT	RFT -- GDR
S	Siemens, FRG
Sa	Sanyo, Japan
Sc	Sesosem, France
Se	Silec, France
SGS	SGS -- Ates, Italy
So	Soral, France
Sg	Signetics, Great Britain
Sp	Sprague, USA
Sl	Sylvania, USA
St	Standard Telephones, Great Britain
Sx	Siliconix, USA
Tfk	Telefunken, FRG
Ta	Tesla, Czechoslovakia
Te	Teledyne, USA
Th	Thomson, -- CSF, France
Tc	Toshiba, Japan
Tx	Texas Instruments, USA
Tu	Tungsram -- Hungarian People's Republic
U	Unitrode, USA
Un	Union Carbide, USA
V	Valvo, FRG
Vr	Varian, USA
W	Welwyn, Great Britain
WEC	Westinghouse Electric Corporation, USA
ZSRR	USSR

3024

CSO: 5500

BRIEFS

MEDIUMWAVE TRANSMITTERS--Two new transmitters to enhance and modernize radiobroadcasting in Guantanamo Province have recently become operative on La Pina hill. The equipment is of the latest technology and it is destined to provide optimum transmission of radio programs on an international range. Frequencies involved are at 1070 and 700 kilohertz, with a ten-fold increase in the former and a fourfold increase in the latter, over the old transmitters. Also installed were two NEC and FM polychrome television transmissions. [Text] [Havana JUVENTUD TECNICA in Spanish Oct 79 p 88].

CZECHOSLOVAK RADIO PROTOCOL--Prague--Czechoslovak Radio Deputy Director Karel Simon and Cuban Institute for Radio and Television Vice President Manuel Yepe today signed a protocol for cooperation between the two institutions for 1981-85. Both parties stressed the two countries' achievements in this area and their readiness to continue working toward wider relations. Yepe is taking part in the 55th session of the Administrative Council of the International Radio and Television Organization which opened today. [Excerpt] [FL092240 Havana Domestic Service in Spanish 2130 GMT 9 Apr 80 FL]

CSO: 3010

NICARAGUA

'MUNDIAL' PROTESTS REQUIREMENT ON REBROADCAST PROGRAMS

PA290229 Managua Radio Mundial in Spanish 1930 GMT 28 Mar 80 PA

[Excerpts] This morning we received an order from the general management of Radio Mundial to refrain from broadcasting in our newscast reports from foreign radio stations, unless we request the proper permission from the Culture Ministry to broadcast news of this kind.

In our newscasts, Mundial and Hoy, we do not transmit the news from abroad directly. Instead, it is recorded and retransmitted later. At times these news items are broadcast up to 2 hours later. Therefore, we are not making direct transmissions.

We have the permission of all the radio stations involved to rebroadcast their programs, with the exception of Radio Havana and Radio Moscow, and we are in the process of complying with the formalities in these cases.

Our newscasts have been distinguished precisely for broadcasting from the site of events in the country, producing the best news which is on the front pages of the world's newspapers. We repeat, we do not make direct transmissions, which is the activity covered by the law governing the communications media. Instead, we broadcast in a deferred manner, news items from programs--not the entire programs--of radio stations that have been friends of Nicaragua, particularly after the triumph of the revolution.

We broadcast one or sometimes two items from complete programs lasting up to 2 hours: News which refers to Nicaragua and to its revolutionary process and we regulate and censor them. Yes, we censor such news to see that it does no harm to our country's development. It is one way to have Nicaraguans get to know what people think of us abroad.

We cannot see why we should have to ask permission to broadcast a report from Cuba, from the Vatican, from the USSR, from Venezuela, from the United States. And we will not request permission. We will not request permission because we feel that this interpretation of the law is interfering with our work.

We will not ask for permission because we feel that we are not violating any law. We will simply deprive our audience of the professional services of top-ranking journalists because we will no longer broadcast a single news item recorded abroad, to the detriment of our freedom of work and the people's right to be informed.

We do not know why, with each passing day, more problems are caused for the revolution because of the negative attitude of its officials. This attitude reflects ideas that run contrary to the true spirit of our revolution.

CSO: 5500

PANAMA CHARGES U.S. VIOLATING RADIO FREQUENCIES

PA282024 Panama City MATUTINO in Spanish 26 Mar 80 pp 1-A, 2-B PA

[Text] The continuous violation of the Torrijos-Carter treaties was discussed by a Panamanian delegation headed by Rafael Vargas Santos at a conference held in Argentina on Monday, 24 March. The Panamanian representation's statements are given below.

On 24 March, a radiobroadcasting conference was held in the Argentine capital attended by over 200 delegates from a number of countries here in America and the rest of the world. The Panamanian delegation raised an important issue. The Panamanian representative, member of the delegation presided over by the undersigned, Rafael Vargas Santos, who represented Ambassador Hugo Torrijos Herrera, said, among other things:

The Panamanian Government wishes to submit evidence before the plenum of this regional radiobroadcasting conference of a number of unilateral U.S. interpretations of the Torrijos-Carter treaties, which constitute flagrant violations of our country's territorial and sovereign integrity.

Among these violations, we can specifically mention the following:

The United States has unilaterally interpreted the agreement on frequency use (Panamanian radioelectric) and administration of the radio spectrum in such a way that it can choose and use any frequency it wants without prior authorization by the Panamanian authorities. This is the case noted in Document No 46 of this conference. There is a U.S. request for the two radio stations in the now extinct Panama Canal Zone, which came under Panamanian jurisdiction on 1 October 1979.

The Panamanian representative added: "My country's government does not accept this interference and demands that the United States formally request these radio frequencies from our government. without their being assigned to and registered for Panama by the IFRD [expansion unknown], the organization that regulates the various countries' frequencies, which the United States may provisionally use on our sovereign territory.

"Through its administration," the Panamanian diplomat added, "the United States has ignored its commitments to Panama and has not yet paid the Panama Canal annuity.

"The United States has not yet appointed the members that will represent it on the board of directors of the Panama Canal administration, which includes four Panamanians.

"The U.S. administration is also trying to charge Panama for the right to drink the water of its own rivers. Panama flatly refuses to pay other countries for the right to use the waters of its own rivers. Panama very respectfully asks all friendly nations to support our just and sovereign demands," the Panamanian representative said in conclusion.

After this important statement by the Panamanian delegation, made at the regional radiobroadcasting conference on Monday, 24 March, the Panamanian group received the general and unanimous support of all Latin American countries for our sovereign cause. Tomorrow, the Panamanian delegation will present a draft resolution, whose approval can be guaranteed, asking the IFRD to eliminate the acronym PNZ, which had been registered as property of U.S. radio stations in the so-called and now extinct Panama Canal Zone.

CSO: 5500

INTER-AFRICAN AFFAIRS

CENTRAL AFRICAN PRESS AGENCY COMMUNICATIONS NETWORK DISCUSSED

AB272130 Kinshasa AZAP in French 1725 GMT 27 Mar 80 AB

[Text] Kinshasa, 27 Mar (AZAP)--From 28 to 30 March, Kinshasa will host the conference of the press agencies of the central African zone which comprises 11 countries from the center of the continent (Zaire, the People's Republic of the Congo, the Central African Republic, Cameroon, Gabon, Sao Tome and Principe, Rwanda, Burundi, Chad, Angola and Equatorial Guinea).

The participants in this meeting want to draw up an inventory of the facilities of the national agencies of the member states of the pool and define the type of communications network to establish between the national agencies, the pool center and the headquarters of the PAN-AFRICAN NEWS AGENCY (PANA). The ZAIRIAN PRESS AGENCY was chosen by the conference of information ministers, held in Addis Ababa from 4 to 8 April 1979, as the starting point which is to provide liaison in the gathering of news from central African countries.

This year, high quality multiband radio communications systems using microwave or tropospheric transmission are scheduled to be set up between Zaire, the Congo, the Central African Republic, Gabon, Equatorial Guinea, Cameroon and Chad. Sao Tome will be connected to Libreville by an HF [high frequency] radio communications circuit. Rwanda and Burundi will be linked to the Zairian national network by HF radio communications and to the eastern subregion by VHF [very high frequency] systems using the network of the East African Community. Communications with Angola are now carried out by means of an HF radio communications system, which will be replaced by microwave radio communications circuits linked to the Congo.

INTELSAT satellite communications earth stations exist or are in the process of being installed in six countries (Zaire, the Congo, Gabon, Cameroon, Chad and Angola). Feasibility studies for other stations are underway.

Linkages with the other subregions are provided toward the south, by Zaire, as far as Zambia, toward the east, by Zaire, as far as Tanzania; toward the northwest as far as Nigeria. The Kinshasa conference comes in the wake of the intergovernmental conference recently held in Luanda (Angola) and which established the foundations for the operation of the PANA.

CSO: 5500

INTER-AFRICAN AFFAIRS

BRIEFS

PAN-AFRICAN NEWS POOL DELAY--Minister of Information and Broadcasting Services Mr Mark Tambatamba has said the PAN-AFRICAN NEWS AGENCY may not become fully operational in July as expected, because only two regional pools turned up for a special meeting to discuss the functions of PANA and its regional pools in Senegal recently. Mr Tambatamba, who has just returned from the meeting today, said only southern and eastern regional pools turned up for the meeting, and that this meant documents discussed were only based on what these two PANA sections had to offer. The minister explained that this meant that the program set by the intergovernmental council in Angola in January will not be accomplished as arranged, because PANA still must wait for the other three regional pools to present their documents to the head office before things can be finalized. [Text] [LD241036 Lusaka Domestic Service in English 1115 GMT 23 Mar 80 LD/CA]

CSO: 5500

KENYA

BRIEFS

NEW RADIO TRANSMITTERS--The Ministry of Information and Broadcasting will soon install transmitters and booster radio stations to expand radio reception in the country. This was said by an assistant minister in the ministry, Mr Mgbogori, in a 3-day meeting in Nairobi today, attended by permanent secretaries as well as directors of information and broadcasting from six African countries. Speaking on the importance of radio as an effective channel of communication, Mr Mbogori called for comprehensive and systematic approach and policy in order to maximize its effectiveness in different communities. He expressed concern that while developing countries are acquiring all equipment required for the dissemination of news there was little emphasis on research into the effectiveness of communications and the needs of the community being communicated with. [Text] [LD311636 Nairobi Domestic Service in English 1400 GMT 31 Mar 80 LD/EA]

CSO: 5500

BRIEFS

TELECOMMUNICATIONS CONTRACTS--Two French firms, CIT-ALCATEL and the Telecommunications Business Corporation (SAT) have been awarded Mauritian Government contracts: CIT-ALCATEL for expanding electronic exchanges in Port Louis and Floreal so as to increase service to an additional 10,000 customers. Substations will be opened in Triolet, Grand Baie, Mapou, Goodlands, Rose-Belle, Plaisance and Flic-en-Flac. SAT will install a hertzian-wave network between rural regions. The estimated cost of the two projects is 28 million francs. [Port Louis THE NATION in French 4 Mar 80 p 1]

CSO: 5500

NIGERIA

BRIEFS

NEW LAGOS PHONE LINES--Twenty-one thousand telephone lines came into service in Lagos at the weekend. These were provided by three exchanges just opened at Ebute-Metta, Oponri and Ikeja. The exchanges were supplied by the International Telegraph and Telephones (ITT), which said it hired and trained more than 800 technicians for the installation. ITT chairman Chief Abiola said the company had completed for the Ministry of Communications 26 exchanges and extensions which provided 84,000 lines. Opening the exchanges the minister said Lagos had 10 of the 14. "The only exchanges left to be completed are the new ones at Apapa, Shomolu, Isolo and Amuwo--Odofin," he said. More exchanges are to be commissioned soon at Umuahia, Enugu, Abakaliki, Jos and Lokoja. [Excerpts] [Lagos DAILY TIMES in English 25 Feb 80 pp 1, 24]

CSO: 5500

ZBS TO BECOME A CORPORATION

Lusaka TIMES OF ZAMBIA in English 30 Mar 80 p 1

[Article by Daniel Mwale]

[Text] The Government has approved plans to turn the Zambia Broadcasting Services [ZBS] into a corporation in an effort to revamp its operations and improve efficiency.

Disclosing this yesterday, Minister of State for Information and Broadcasting, Mr John Banda, said all the final details of transforming the ZBS from a Government department had already been worked out.

Mr Banda also said the ministry was still considering and "sorting out" details on the kind of personnel the Government should second to the proposed Pan-African news agency.

On the ZBS, Mr Banda said full implementation of the changeover could "take some time" to achieve.

The minister dispelled reports that the Government planned to standardise salaries of employees in the mass media to stem resignations of people from there to the parastatal sector. He would not discuss details of the set up of the corporation.

Government approval to turn ZBS into a corporation comes in the wake of resignations by many senior personnel from both the radio and television sections of the department.

There has been a public outcry against falling standards and poor radio and television reception.

Last year, in a move to shake up the leadership at ZBS, President Kaunda created a new post of director-general at permanent secretary level to head the department and appointed Mr Alport Phiri to fill it.

The then director of Zambia Broadcasting Services, Mr Edgar Chella was moved to the Ministry of Information and Broadcasting as under-secretary. A spokesman at State House said then that the changes were designed to strengthen the leadership of the mass media at the top.

Among those affected by that change were former deputy director, Mr Bruno Mweene, who was brought in from Zambia Information Services to be deputy director-general at ZBS.

In 1979 former Minister of State for the Ministry of Information and Broadcasting, Dr Mutumba Bull said the ministry was considering recommendations by a committee appointed at ZBS to improve conditions.

According to sources at the ministry, operations of the ZBS would be streamlined if the Government implemented the decision to turn the institution into a corporation.

This would be particularly so if the news service was fashioned like the defunct Northern Rhodesia Broadcasting Corporation, its forerunner.

The proposed corporation to replace ZBS would have the responsibility of controlling Radio Zambia which broadcasts on three channels--the general, home and external services.

One of the major complaints among ZBS workers is that the present salary structure was not conducive to attract and retain high calibre staff in all the divisions because it was based on Government conditions of service, and the appointments were done by the Public Service Commission.

The Government is building with Japanese aid, a multi-million Kwacha mass media complex in Lusaka to house among other departments, ultra modern radio and television studios which are expected to improve service.

CSO: 5500

TECHNOLOGY, IMPLICATIONS OF EUROPEAN TV SATELLITES

Frankfurt/Main FRANKFURTER ALLGEMEINE in German 12 Mar 80 p 11

/Article by Dietrich Ratzke: "Glut of Program From Space; European Television Via Satellite; Choice Between Sixty Channels"/

[Text] The development of electronic communications technology, which has been moving along rapidly, will make possible, from the mid-1980's on, to do what up until only recently had been termed unrealistic by communications engineers: as many as 60 television programs will be directly receivable from space at almost any place in the FRG. And there is more: according to the data just released about the most recent technical developments, German satellite programs will be receivable in excellent technical quality not only in the entire GDR, but also in the Eastern bloc, indeed even in a part of the Soviet Union. Commercial transmissions of satellite programs by Radio Luxembourg will reach not just a small part of the FRG, but rather the entire country, with high technical quality. With this development, satellite TV is turning into an international political issue with unpredictable effects, even before the first transmission begins. Will it be the gigantic ideological propaganda machinery of the coming decades or will it be commercial advertising roaring all across Europe? Or will it be the infrastructure for an extensive pan-European television network, which could unite the peoples of Europe more strongly than all European parliamentary groups and all Europe initiatives together?

Even 10 years ago the notion that one day everyone would be able to receive television and radio programs transmitted from a TV satellite stationed in space directly into his home, was considered to be the utopia of progressive dreamers. Even 5 years ago the engineers said that direct reception of satellite programs from space would require gigantic dish-shaped parabolic antennas which would have to have a diameter of at least 2 meters in order to be able to pick up useable TV signals. However, with the development of more and more efficient, but mainly smaller satellite receiving antennas, in a short period of time reality developed out of a utopia that had been condescendingly smiled at: satellite antennas which have only recently been available are just 90 cm in diameter; in spite of this modest dimension they are capable of receiving far more satellite programs than had been possible

up to now with the bigger antennas--and at DM 1,000 and in industrial mass production they are within the reach of even the private buyer.

Engineers make a distinction between telecommunication satellites and direct TV satellites. Telecommunication satellites transmit information, for example, telephone conversations, from one subscriber to another. TV satellites, however, like a mirror hung up in space, reflect television and radio programs which are broadcast from a station back to a fixed segment of the earth's surface. In this broadcast zone, the programs can be directly received by an unlimited number of viewers who are equipped with a parabolic receiving antenna. If one wants to receive directly the future satellite programs of the West European countries, then the antennas must be aimed at the satellite which is "anchored" about 36,000 km above the equator at a position 19° west.

Positioning the satellite at a height of about 36,000 km is the equivalent of locating a transmitter on a mountain that is 6 km high and 11 km distant. Since the satellite is "anchored" in a geostationary manner, that is, because the orbit velocity of the satellite is synchronized with the speed of the rotation of the earth, the antenna does not need to be adjusted to a constantly changing satellite position. The inclination of the parabolic antenna in North Germany is thus 23°, in South Germany 29°. The satellites of the Eastern bloc have other orbit positions, thus a different antenna angle. Thus, the future GDR satellite, for example, is positioned at -1° west. The people in the FRG or the West European countries who want to receive these programs must accordingly change the direction of the receiving antenna to fit the situation; this also applies to the people in the GDR who want to receive Western programs. Thus, at any time it can be determined from the position of the antennas whether a Western or an Eastern satellite is being received.

At the international World Administrative Radio Conference (WARC) in 1977 in Geneva every country, large or small, was allotted five TV channels which is roughly equivalent to 40 ultrashortwave stereoprograms. Since transmission from satellites cannot be precisely restricted to national borders, the result is the so-called overspill, that means, transmitting national TV program beyond political borders into neighboring countries.

The extent of the overspill depends basically on two factors: the transmitting power of the satellite and the sensitivity of the receiving antenna. Since the transmitting power of the satellite is limited by the WARC resolution (5-8 KW of primary power per satellite, meaning 5 channels of 250 watts each), enlarging the transmitting "lobe," that is enlarging the reception area, can be achieved only by refinement and sensitization of the receiving antenna. And it is at this point that technical development became a political issue.

While some years ago it was assumed that the zones beyond national borders in which foreign programs could be received because of overspill were very limited, in the past few months the areas of reception have undergone dramatic growth because of the most up-to-date antenna designs, primarily from Japanese

manufacturers. Even 1 year ago people worked on the assumption that, for example, Radiotele Luxembourg (RTL) could transmit its scheduled German-language satellite commercial programs at best as far as the Ruhr district, and in the south scarcely as far as Frankfurt/Main. The situation looks completely different today because of the rapidly increased reception sensitivity of the antennas: if RTL starts its transmission in the mid-1980's, the Luxembourg "lobe" will reach the entire FRG except for a small part in the southeast. Reception of RTL in the entire FRG, including Berlin, is made possible by only a modest increase in the size of the antenna, by installation in the head position of a combined antenna installation or by foregoing the highest of five levels of reception quality. Thus, Luxembourg's satellite not only covers the entire FRG, but also vast parts of the GDR.

Overspills into foreign territories by other national satellites are no less dramatic. Thus, the FRG, which is geographically centrally located, reaches with its satellite programs not only the GDR, but also Poland, and even a part of the Soviet Union as well as almost all the other Eastern bloc countries and half of France, and in addition to Switzerland and Austria a large part of Italy, the Benelux countries, Denmark and parts of Norway and Sweden. Conversely, the entire FRG, given these conditions, is reached by the satellite programs of all countries directly or indirectly adjacent. That is 5 programs each from at least 12 countries. That in turn means a total of about 60 programs beamed from space in addition to the 5 German satellite programs and the television and radio channels using terrestrial transmitters.

At a time when people thought that the overspill of television programs into foreign territories was relatively limited, direct television by satellite was becoming an international point of dispute. Very early the Soviet Union tried to hinder the undesirable effects of the overspill: the UN Space Committee had to deal with a Soviet draft of a "convention on the use of artificial earth satellites intended for direct reception of television transmission." This convention is supposed to avoid the transmission of programs when the country concerned has not given its assent. This demand, however, violates various international agreements, for example, the Final Act of Helsinki dated 1 August 1975, Basket III, No 2, in which there was a commitment to "free and more comprehensive dissemination of information of all types." Furthermore, in this connection it was a question of violating the media declaration at the 20th UNESCO Conference at which the FRG's minister of foreign affairs also advocated a comprehensive "flow of information" not restricted to borders.

Not only totalitarian Eastern bloc countries are afraid of television from space. In the FRG, satellite TV is by no means interpreted as a special opportunity for European integration, that is, a system of information which would have to be continuously developed with great energy under European points of view. While smaller countries fear that satellite TV will bring cultural foreignization because of an oversupply of foreign television programs from larger, economically and culturally dominant countries, the Federal government is primarily afraid that the public law television system will be undermined by foreign commercial satellites.

The preferred whipping boy is RTL, a transmitter which for years has been vigorously competing with the public law broadcasting institutes in the FRG. The RTL representative in the FRG, Thoma, says: "For public law broadcasting institutes we are somewhat like the yellow peril." The former superintendent of West German Radio, Klaus von Bismarck, does not exactly consider the large number of European satellite programs, which in the future will range over national borders, as an opportunity for the benefit of Europe, but rather as "senseless program proliferation." Last fall in a discussion with Giscard d'Estaing, Chancellor Schmidt blocked RTL's plan to rent a channel in the German-French TV satellite, Sat D/F. In response to a large media policy interpellation by the CDU/CSU the Federal government stated its ideas more precisely and said that it was in favor of "a European broadcasting convention which guarantees the freedom of information and communication within an international framework, but which hinders the impairing of national media structures through foreign commercialization." This settled a controversy, which threatened the coalition between Social Democratic ministers and the FRG minister for inner-German relations who is responsible for media questions.

The key issue in this controversy was mainly the question of whether a convention against commercial satellite programs was contrary to European regulations, thus Article 59 of the EC treaty which controls services between EC countries. With the formula that was found, the Federal government is reconciling itself with the disrupted declaration of principle concerning the use of satellite broadcasting which resulted from the UNESCO general conference in 1972 and which had been especially welcomed by the Eastern bloc and developing nations.

The common formula which was devised by the coalition partners appears reasonable only at first glance in respect to media policy and media management. However, if consistently applied, it ultimately will mean hindering comprehensive European satellite television. Any kinds of satellite programs, except those of the totalitarian Eastern bloc countries or of national radio, require financing through advertising. Since even the commercial is a legitimate form of information, hindering commercial broadcasts in countries in which advertising is permitted is a serious restriction of freedom of information. Beyond that, any limitation of Western television freedom, no matter in what form, is happily seized upon in totalitarian countries and is responded to by limiting the reception of programs from the free world.

The push by the Federal government in the direction of a restrictive European satellite convention is all the more astonishing since German public law broadcasting institutes have long since become commercial institutions because they would hardly be able to exist without the profits from commercial broadcasts. And not only that, largely unnoticed by citizens to whom the public law model is held up as exemplary, the public law broadcasters today are also impairing "national media structures through foreign commercialization." One example: For years, South-West Radio has been broadcasting a

special commercial program produced especially for subscribers in Switzerland. For about 1,500 Swiss francs per 30 seconds a classical commercial program in Svyzer-Deutsch is beamed across the border in the forenoon by the FRG. South-West Radio makes no secret of the reason for its actions in broadcasting a foreign-language commercial program to a country in which local broadcasting stations are subject to a ban on commercials: This program, which had been initiated by a Swiss advertising firm, was agreed to with the statement that it is "in the interest of improving our sales."

To date, the Luxembourgers have done nothing different, nor do they intend to do anything different with the satellites. The Luxembourgers, whose conservative programming has not the slightest thing to do with sex and crime and in whose satellite program the soap opera may well be the most daring offering, know where the market gap is in German television. By limiting commercial time and putting advertising blocks into the time frame before 8 pm they are familiar with the express wishes of the German advertising industry for more opportunity to advertise on television: the artificially caused scarcity of time for advertising, the German offer that is not in line with market conditions, is driving the advertising clientele to the Luxembourgers.

At first, the anticipated sales figures, which were cited for a Luxembourg satellite commercial television sounded threatening: from commercial broadcasts of 20 minutes per day, German television institutes in 1978 made a profit of DM 1,535,000,000. According to internal trade information, RTL is said to be aiming at offering German advertisers twice the advertising time. As it was figured, this would approximate rather exactly the advertising sales of the five large German magazine publishers in 1979. Thoma balances it out this way: with pessimistic estimates RTL would take in DM 300 million per year with a German-language satellite commercial program, with optimistic estimates it would take in DM 600 million per year.

Lower Language Barriers in Europe

Gustave Graas, general director of RTL, has commissioned three international consulting firms to come up by the end of 1980 with a comprehensive set of figures about market expectations and RTL's opportunities. He does not understand the attitude of the FRG government in the satellite question. "I view the overlapping of satellite reception areas not as a national misfortune for some countries in which the continued development of the television system is being frantically kept up." Graas views the overlapping of satellite programs as a great opportunity for a common Europe. Language problems would become increasingly smaller because of the increasing multilingual capability of Europeans, but mainly because of the new subtitling capabilities, as for example, the video text method.

According to Graas, Luxembourg, in contrast to other countries, is not using radio to engage in power politics. Thus, his country is especially suited to assume a central function in future general European satellite television

in so far as this idea is not hindered by the "European convention" which the German government has been aspiring to. In the meantime, RTL has given up its intention of renting a channel in the French satellite and using it to broadcast to the FRG. The Luxembourg calculations are based on their own satellite which, according to Graas, could be operated "by all means together with other interested private parties, as for example, German newspaper publishers."

RTL's ideas about a German-language commercial program are specific: According to the general Luxembourg motto "television broadcasts are not religious acts, but services" (Thoma). If Radio Luxembourg begins its commercial transmission in 1985 or 1986, the programs will not be interrupted by advertising as is customary in America. Instead of set advertising blocks, short commercial fade-ins between individual program segments are being planned. The total broadcast time is to be 5 hours in the evening at first, later it will also include noontime. Since RTL is counting on the idea that audiovisual equipment, such as video recorders and video discs, will continue to gain ground, they want to produce broadcasts that are up to date and extremely lively. Sponsored advertising is not planned. On the basis of its sales estimates to date, RTL sees no danger for German magazine and newspaper publishers. It is a sure fact that magazine and newspaper reading frequently rises with an increasing number of television programs. Yet, the view in Luxembourg is that starting in the 1990's German magazines will have to surrender part of their advertising growth rates to satellite programs.

In October 1979, in the framework of the German-French summit discussion, it was agreed to establish a joint satellite consortium to build TV satellites. It includes Messerschmitt-Boelkow-Blohm and AEG-Telefunken and French national Aerospatiale and Thomson CSF. Messerschmitt-Boelkow-Blohm and Aeorspatiale will each build half the satellites, AEG/Thompson will be responsible for the electronics. In the next two decades they hope to be able to meet about 30 percent of the total world demand for TV satellites, in particular, however, the requirements of developing nations. China is an example of how large the demand for TV satellites is in developing countries. In order to supply the entire country with television programs approximately 10,000 ground station television transmitters would be required. The People's Republic of China could shoot 8 to 10 TV satellites into space and achieve the same goal for only about 20 percent of these installation and transmission costs. Talks by a 12-member Chinese delegation for space technology, which were held at the end of last year with Messerschmitt-Boelkow-Blohm to negotiate the construction of "one or more TV satellites" ended with the promise of success.

According to the German-French agreements, two almost identical satellites are to be produced first for the preoperational phase: TV-Sat D and TV-Sat D/F. Each of the two satellites will be designed for television channels in the 12 gigahertz range which were awarded by the International Frequency Conference. At first, however, only three channels per satellite are to be utilized. The German satellite will be launched first in 1984 with the

German-French launcher Ariane, followed 6 months later by the French satellite. The German satellite has long since been under state and public law. Since thus far German newspaper and magazine publishers and other interested private parties have only verbally announced their claims for use of the satellite channels, the ARD [Working Group of FRG Broadcasting Institutes] and the ZDF [Second German Television Program] programs will be transmitted between 1984 and 1986 via one satellite channel each; in addition there will be up to 12 stereo broadcast programs. In this experimental phase the Federal Post Office wants to involve 10,000 TV subscribers who can see and hear the programs by direct receiving antennas. Then, starting 1986-1987 the actual operational phase is to begin with up to five TV programs per satellite.

12124

CSO: 5500

FINAL DECISION BY NORDICS ON NORDSAT AGAIN POSTPONED

Oslo AFTENPOSTEN in Norwegian 4 Feb 80 p 3

[Article by Lars Hellberg, AFTENPOSTEN's Stockholm correspondent: "Nordsat Postponed Again, Decision in 1981 At the Earliest"]

[Text] Stockholm, 3 Feb--Nordsat plans are once again postponed to an uncertain future time. No decision can be reached for at least 1 year. The Nordic Council will meet in Reykjavik on 15 April. In anticipation of a statement concerning the delayed Nordsat report the Nordic Council's cultural committee is advocating a cleanup of the impossible jungle of different research projects already underway.

But this cleanup will be a long-term effort. Therefore the cultural committee has asked for a final report in good time before the meeting of the Nordic Council in Copenhagen next year.

According to the committee chairman, Swedish social democrat Sture Palme, the background for this cleanup requirement is that through the years money has been appropriate from different sources for a number of research projects, often as the result of "desperate appeals," in areas of little interest. To begin with the committee wants a research register which will give the council the perspective that it must have in order to assign priorities to research tasks.

But when it comes to the plans that have been drawn up over the years for transmitting radio and TV programs of the region to all Scandinavian citizens via satellite, the council in Reykjavik will for the nth time be compelled to repeat the arguments without reaching any decision.

When the council meets on 15 April this year, the different reports will be studied by a joint working group with participants from all of the council's committees. But one can already assume that the opinions will be so divided that it is more than doubtful that the members of the parliaments and--last of all--the governments can agree to carry out the Nordsat plans,

even though they have now given themselves an extra year. While the council reports go their laborious way, the plans are moving ahead with a West German TV satellite and a satellite with launch point in Luxembourg, both of which would reach large portions of Scandinavia.

In the meanwhile the culture-politicians of the Nordic Council are concentrating on simpler and more mundane problems, e.g. on 1980 as the Scandinavian language year. In that connection a book is being published "on speaking Norwegian."

Before the session in Reykjavik the traffic committee suggests making 1982 Scandinavian traffic safety year. The chairman of the committee, Bjarne Mork Eidem of the Labor Party, lists a number of projects which can be discussed to reduce fatalities on the highways.

9287

CSO: 5500

INTERNATIONAL AFFAIRS

NORWAY TO BUILD TWO STATIONS FOR NATO 'CROSS FOX' NET

Oslo AFTENPOSTEN in Norwegian 3 Mar 80 p 40

[Text] Norway has been given a central role in a NATO project which is to increase the possibilities of allied vessels to operate in waters vital to the defense of Europe. At a cost which probably will exceed 300 million kroner, NATO will develop signal service stations in Norway and four other countries. The main task of these stations will be to communicate with the naval task force 'Strike Fleet Atlantic.'

Reliable communication between vessels and headquarters on land may be of decisive importance for a naval task force to carry out its tasks. Already today there are signal service stations on land, the tasks of which are to serve NATO's 'Strike Fleet,' but this radio equipment is gradually becoming obsolete.

The new project, the code word for which is 'Cross Fox,' is remarkable for its reliability. Fully developed, the modernization will mean that necessary radio contact can be guaranteed nearly 100 percent of the time. Under all circumstances, at any time, and regardless where at sea the vessels may be located, they will be certain to be able to send and receive important messages. This will be the case even where an enemy is carrying on powerful electronic warfare, AFTENPOSTEN has learned.

The Defense Department tells AFTENPOSTEN that the joint signal information service of our domestic armed forces has been given the task to be in charge of the acquisition of the technical equipment. This is considered quite an honor, considering that the other participants in the project are big countries such as Great Britain and West Germany, in addition to the Netherlands and Denmark.

NATO agencies have now cleared this project, but financial means for its realization have not yet been released. According to informed sources, the big disbursements for the signal information service are not expected to be made until the latter half of 1981. During the last few months,

agreements have been made among the countries concerned on the purely practical aspects of the introduction of the project, and, as far as AFTENPOSTEN has learned, West Germany, as the last participant country, is now ready to sign a so-called 'Memorandum of Understanding.' The idea is that the entire project will be financed by NATO. In Norway, a new broadcasting station and a radio receiving station will be built, in addition to those already existing.

NATO's 'Strike Fleet' is under the command of the same admiral who is in charge of the Second Fleet of the United States. In addition to a large number of U.S. vessels, vessels from other allied countries will be participating. The tasks will be, among other things, to fight for control of the air space with base onboard aircraft carriers, to fight submarines, to participate in landing operations, and to protect convoys with reinforcements sent by sea to Europe.

7262

CSO: 5500

FINLAND

AUTHORITIES HOPE COURT'S STIFF SENTENCE TO DETER PIRATE RADIO

Helsinki UUSI SUOMI in Finnish 1 Mar 80 p 3

[Article: "Tougher Sanctions Against Pirate Radio Operators"]

[Text] Those who operate illegal pirate radios can now expect tougher treatment in Finland. This seems to be the direction indicated by a recent compensation ruling, in which the operator of an illegal pirate radio station received a compensation drubbing amounting to 34,000 markkas.

The sentence was handed down a few days ago in the Porvoo District Court.

"Never before has such a stiff compensation sentence been imposed on a pirate radio operator in our country," states Senior Engineer Kalevi Teravuo of the Radio Section of the Postal and Telegraph Administration.

"This incident, which was disclosed last year, was given more careful treatment than heretofore. The compensation demands were decisively raised by the fact that the Teosto and Gramex League were also included.

Teosto sees to it that the copyrights of composers are complied with and the Gramex League for its part watches out for the rights of producers and artists.

The pirate radio operator sentenced in Porvoo is now forced to pay more than 19,000 markkas in compensation to Teosto and a full 12,000 markkas to Gramex. The illegal station broadcast music in addition to spoken text.

According to Senior Engineer Teravuo illegal radio stations have been disclosed in various parts of Finland in recent years, generally several times a year.

They have been found in various parts of the country, the first one in Kemijarvi, Lapland, several years ago.

The most recent incident was the case that went before the Porvoo District Court.

Dangerous Broadcasts

The Postal and Telegraph Administration has confirmed that disclosed pirate radio activity also becomes an affair of the police. The consequence of this activity is fines and compensation. In addition, the equipment of an illegal radio station is confiscated by the state.

Senior Engineer Teravuo states with amazement that the homemade equipment of these pirate radios are frequently dangerous.

"In addition to outsiders, the equipment is also dangerous to the user. They are operated with large currents of electricity, which are not properly concealed and protected," states Teravuo.

The strength of these pirate radios is frequently only a few kilowatts. Their broadcast range is thus not very great.

It has been observed that generally young people are interested in pirate radio operations.

10576

CSO: 5500

FRANCE

BRIEFS

VIDEOTRANSMISSION INTERNATIONAL--The offices of the director of telecommunications, Telediffusion de France and of the Societe Francaise de Production have joined to set up "Videotransmission International," a business group that aims to promote, carry out and make money in videobroadcast operations. The videotransmission in question consists of transmitting sound and video images for large-screen projection and several other operations, broadcast for various segments of the viewing public, have been going on in France for a number of years. This new arrangement should furnish new dimensions to this means of communication. [Text] [Paris L'HUMANITE in French 15 Mar 80 p 2]

CSO: 5500

FREQUENCY LACK CAUSES FREEZE ON AREA MOBILE PHONE CHANNELS

Oslo AFTENPOSTEN in Norwegian 29 Feb 80 p 36

[Text] After 1 April it will not be possible to get new mobile telephones under the VHF system in the greater part of the Østland area. It is the frequency lack that is the reason why the Teleworks now introduces a concession halt to the mobile telephone system which is nation-wide. It will affect applicants who reside or carry on business in Østfold, Akershus, Oslo, Vestfold and parts of Buskerud and Telemark. On the other hand, there is still available capacity under the other mobile telephone system, UHF, which is in operation in the Østland and in Sweden and Denmark.

Christian Bugge Hjorth, head of the information department of the Telecommunications Directorate, tells AFTENPOSTEN that the capacity problems in respect of mobile telephones is temporary until a new automatic system has been introduced under Nordic management. This system will be introduced first in the Østland in the middle of next year and is scheduled to be completed in 1985.

The interest in mobile telephones has been far greater in Norway than in many other countries and greater than had been expected by the Teleworks. To make up for this, the UHF system was introduced. But capacity problems, nevertheless, have developed. The Teleworks has tried to get people to postpone acquiring mobile telephones until the new automatic system has been introduced, but this campaign has not had sufficient effect.

"If we had not done something radical now, the entire network would have collapsed, and this would have created problems to all subscribers," Bugge Hjorth says.

He is still of the opinion that those who are able to, ought to wait for the automatic system, which will be both better and cheaper. In addition, one will avoid having to buy new equipment.

The municipalities for which an exception has been made in the Østland are the following areas in Buskerud: Rollag, Nore and Uvdal, Hol, Ål, Hemsedal, Gol, Nes and Flå. In Telemark, an exception has been made for Nissedal, Fyresdal, Kviteseid, Tokke, Vinje, Tinn, Hjartdal and Seljord.

According to Bugge Hjort, it will not be possible to speed up the introduction of the automatic system as one is dependent on the other Nordic partners in the cooperation. Also Denmark has problems of capacity in respect of mobile telephones.

7262
CSO: 5500

BRIEFS

PAGING SERVICE ON FM--The Teleworks is at present undertaking test transmissions of paging signals via some FM broadcasting transmitters in the Østland. The tests constitute part of the work of evaluating different solutions to a possible future public paging service in Norway, the Teleworks states. By means of a paging service, it will be possible, from any telephone whatsoever, to notify persons equipped with pocket-size radios which give off a peeping sound. The signal will warn the subscriber to carry out an act which has been agreed upon in advance, for example to call the office. The Teleworks expects that it will be possible to introduce the paging service in Norway as of 1983. [Text] [Oslo AFTENPOSTEN in Norwegian 29 Feb 80 p 36] 7262

CSO: 5500

SWITZERLAND

BRIEFS

RADIO-TELEVISION DIRECTOR--Leo Schuermann has just been appointed director-general of the SSR [Swiss Radio-Television Company] to replace Stelio Molo who will be stepping down at the end of February 1981. Born 10 April 1917, Schuermann [sic] has occupied the position of vice-president of the BNS [Swiss National Bank] since 1 January 1976. A native of the Canton of Zurich, he completed his law studies at the University of Basel in 1939 when he presented his doctoral thesis. As a notary, lawyer and cantonal judge, he entered the Conseil National (lower chamber of the Swiss Parliament) as a Christian Democrat. [Excerpt] [Paris LE MONDE in French 2 Apr 80 p 20].

CSO: 3100

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WORLDWIDE REPORT: Telecommunications Policy, Research and Development

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